

250 Types Studied

'Y' Class Gleans Herbal Data

Contrary to popular belief, all herbs are not inherently good, and all drugs are not inherently bad.

That's the observation of Dr. Bruce H. Woolley, director of Brigham Young University's McDonald Health Center and teacher of a food science and nutrition class entitled, "Herbs: Fact or Fallacy."

In the class, he gives an objective analysis of therapeutic and nutritional claims made for herbs and natural products by exploring the pharmacological, nutritional and medical viewpoints.

"What the students decide about these 250 herbs studied during the semester is their business," Woolley says. "At least they will have been exposed to some details about the herbs that they might not get elsewhere."

He has taught the class four times previously, but enrollment was limited because he required students to have organic chemistry, as well as human anatomy and physiology. This semester he lifted those requirements in order to reach a more general audience.

Once students have taken the class, they will be able to judge the validity of therapeutic claims made for various herbs, identify toxic reactions to various commonly used herbs, identify general

categories of herbs and match various herbs with their active constituents.

Woolley could talk about 2,000 herbs, but limits his discussions to the most common 250. He points out that about 50 percent of prescriptions written by physicians contain a natural product or derivative of a natural product. "This is particularly true of biologicals such as insulin, various hormones, certain injectables and certain products used to treat infections," he says.

Woolley points out that herbs have been used for centuries to treat a wide variety of illnesses. The ancient Greek physician Hippocrates prescribed willow bark for pain and inflammation about 300 B.C. "He may not have known that the willow bark — salicin — a product similar to aspirin — but apparently he knew that it worked on pains and inflammations," the professor said.

In the 1500s, Woolley noted, the physician Withering began using the foxglove plant for heart problems. "Today we use digitalis, a derivative from the foxglove plant."

The BYU professor said many people in the United States are using products derived from the aloe vera plant, a desert lily which the

Egyptians used thousands of years ago for skin care and embalming.

The aloe vera plant contains two primary parts: the fibrous skin and the clear, mucilaginuous gel. Americans began using it in the 1940s for radiation and X-ray burns. However, one medical profession does not use it so frequently now.

"Aloe vera is not good for acid-type burns," Woolley said. It causes a chemical reaction and aggravates the burn.

"However, it is excellent for use on superficial skin burns such as sunburns. It benefits the healing process and has antiseptic properties."

Woolley points out to students that certain combinations of drugs or herbs may cause adverse reactions. "Some herbs can interact with other herbs, foods or medicines, if taken in certain combinations."

The professor says that many people have taken cayenne pepper, which purportedly is good for gastrointestinal problems. Cayenne reportedly prevents breakdown of pepsinogen to pepsin; therefore, it may have some value.

"However, it may also be a strong irritant to the mucous membrane and gut lining," Woolley observes. "This can

cause severe problems. If a person uses cayenne, he should start with a small dose and work up to larger doses to produce a tolerance to the pepper."

"As far as we know, there is no valid study relating to the use of cayenne to the prevention of cancer."

The health center director warns people about the dangers of chewing tobacco and using cocaine and other drugs.

He says that chewing tobacco has been shown to irritate the inner lining of the mouth. This irritation can lead to certain types of cancer.

"Cocaine, which comes from the plant Erythroxylon coca, grown in some tropical areas of the world, has anesthetic action but can produce a type of dependency and stimulative action," he said. Cocaine formerly was used in medicine, but now medical personnel have turned largely to other local anesthetics.

Woolley said that procaine (a popular local anesthetic) is purported to be an anti-aging drug and is on the market now as Gerovital or GH-3. "It hasn't been proved to retard aging; besides, many people using it call themselves 'naturalists,' and it's synthetic — contrary to most of their beliefs."